

Claims

What we claim is:

1. A method for the combinatorial biosynthesis of one or more compounds comprising:
 - a) providing one or more starter units, wherein said one or more starter units have incorporated therein a functional handle capable of reacting with a functionality present on a solid support unit;
 - b) attaching said one or more starter units to a solid support unit;
 - c) feeding said one or more support bound starter units into one or more biosynthetic enzymatic machinery systems to generate a collection of template structures;
 - d) functionalizing said template structures using synthetic organic chemistry; and
 - e) repeating steps c) and/or d) until a desired collection of structures is generated.
2. The method of claim 1, further comprising functionalizing said collection of structures generated in step e) to provide a collection of unnatural natural products.
3. A method for the combinatorial biosynthesis of one or more compounds comprising:
 - a) providing one or more starter units, wherein said one or more starter units have incorporated therein a functional handle capable of reacting with a functionality present on a solid support unit;
 - b) attaching said one or more starter units to one or more solid support units;
 - c) feeding said one or more starter units into one or more biosynthetic enzymatic machinery systems to generate a collection of template structures;
 - d) functionalizing said collection of template structures to generate a collection of unnatural natural products.
4. A method for the combinatorial biosynthesis of one or more compounds comprising:

1 a) providing one or more starter units, wherein said one or more starter units have
2 incorporated therein a functional handle capable of reacting with a functionality present on a
3 solid support unit;
4 b) feeding said one or more starter units into one or more enzymatic machinery sytstems
5 to generate a collection of template structures;
6 c) attaching said collection of template structures to solid support units; and
7 d) functionalizing said collection of support bound templates to generate a collection of
8 unnatural natural products.

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